

U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

In cooperation with
Cotton Economic Research and
Bureau of Business Research of
The University of Texas at Austin

CLIMATOGRAPHY OF THE UNITED STATES NO. 20-41

LATITUDE 28° 16' N
LONGITUDE 96° 48' W
ELEV. (GROUND) 15 ft.

STATION ARANSAS WILDLIFE REFUGE
ARANSAS COUNTY, TEXAS

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD 1942 - 1971

Month	Temperature (°F)						* Mean degree days	Precipitation Totals (Inches)						Mean number of days								
	Means			Extremes				Mean	Greatest daily	Year	Snow, Sleet			Precip. 10 inch or more	Temperatures		Max.	Min.				
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year				Mean	Maximum monthly	Year		90° and above	32° and below	32° and below	0° and below	Month			
(a)	29	29	29	29	1951	11	1962	15	30	30	30	30	1944	*	0.5	1949	0	15	15	15	15	15
Jan	64.5	45.3	54.9	84	1951	11	1962	358	2.18	2.40	1944	0.1	1.5	1960	0	4	0	*	5	0	0	Jan
Feb	67.9	49.1	58.5	94	1954	14	1951	244	2.45	4.13	1961	0	0	1960	0	4	*	0	2	0	0	Feb
Mar	72.9	54.5	63.7	89	1955	22	1965	138	1.61	2.66	1960	0	0	1960	0	3	0	0	*	0	0	Mar
Apr	78.8	63.3	71.1	98	1953	36	1962	17	2.43	7.05	1957	0	0	1957	0	3	*	0	0	0	0	Apr
May	84.0	69.4	76.7	94	1958	47	1954	1	3.17	5.05	1967	0	0	1967	0	4	1	0	0	0	0	May
Jun	89.1	74.9	82.0	103	1953	57	1970+	0	3.52	5.47	1968	0	0	1968	0	5	11	0	0	0	0	Jun
Jul	91.5	75.9	83.7	101	1954	62	1942	0	2.26	7.50	1942	0	0	1942	0	2	25	0	0	0	0	Jul
Aug	91.8	75.0	83.4	103	1955	60	1965	0	4.49	12.30	1945	0	0	1945	0	5	25	0	0	0	0	Aug
Sep	88.6	71.8	80.2	99	1954	48	1942	*	5.82	7.20	1951	0	0	1951	0	6	13	0	0	0	0	Sep
Oct	82.6	63.6	73.1	97	1950	37	1952	13	3.97	6.75	1954	0	0	1954	0	5	2	0	0	0	0	Oct
Nov	74.3	54.7	64.5	91	1963	27	1951+	106	2.11	3.40	1947	0	0	1947	0	4	*	0	1	0	0	Nov
Dec	67.6	47.9	57.8	85	1964	13	1950	259	2.80	5.55	1971	T	T	1952	0	4	0	0	2	0	0	Dec
Year	79.5	62.1	70.8	103	Aug. 1955+	11	Jan. 1962	1136	36.81	12.30	Aug. 1945	0.1	1.5	Feb. 1960	0	49	77	*	10	0	0	Year

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

† Trace, an amount too small to measure.

* Less than one half.

** Base 65°F

THE CLIMATE OF ARANSAS NATIONAL WILDLIFE REFUGE
ARANSAS COUNTY, TEXAS

The Aransas National Wildlife Refuge occupies the Blackjack Peninsula in the northeast portion of Aransas County. It is bounded by St. Charles Bay on the west, and by Aransas, Mesquite and San Antonio bays on the east. St. Joseph and Matagorda Islands protect these bays from the open waters of the Gulf of Mexico.

Aransas County is flat coastal plain with many bays and inlets. Elevations range from sea level to 50 feet. The sandy loam and coastal clay soils are dotted with mesquites and live oaks. About 90 percent of agricultural income is derived from livestock, chiefly beef cattle. Business income is mostly from tourism, fishing, ship building, and a carbon black plant. For recreation, many fishing, hunting and tourist facilities are available, including Goose Island State Park.

The climate of the Aransas National Wildlife Refuge is humid subtropical with warm summers. Also, the prevailing southeasterly winds from off the Gulf of Mexico provide a climate that is predominately oceanic. Daytime temperatures are warmer in winter than at inland locations while sea breezes in summer prevent daytime highs from becoming as warm as those observed farther inland. Precipitation averages 36.81 inches annually with peak rainfall occurring in September. Because of the abundant supply of moisture available, slow moving thunderstorms, or tropical disturbances moving westward from the Gulf, may dump excessive amounts of precipitation on the area within relatively short periods. The high average rainfall for the month of September is the result of a few exceptionally heavy downpours that occurred in association with tropical storms. The September 1967 total of 20.44, of which 14.93 inches was attributed to Hurricane Beulah, is an example. March is a relatively dry month.

The mean relative humidity, measured at noon, c.s.t., at the Wildlife Refuge is estimated at 70 percent in January, 70 percent in April, and 60 percent in both July and October.

Winters are pleasantly mild at the Wildlife Refuge. Daily temperature maxima average 64.5°F in January, the coldest month. Freezing temperatures, usually confined to an hour or two before sunrise, occur on an average of 10 nights each year. Polar Canadian air masses that push southward across the Texas coast in winter produce days of cool, cloudy, sometimes rainy weather, but these cool spells rarely last longer than 48 to 72 hours. The polar air masses undergo considerable warming by the time they reach the coast. Cloudiness is more prevalent in winter, limiting available sunshine to about 50 percent of the total possible. Precipitation is most often in the form of slow, gentle rains.

Summers are warm and humid, but sea breezes during the afternoons and evenings moderate the afternoon heat. An occasional shower or thundershower adds variety to the weather that otherwise changes little from day-to-day.

Spring and fall are the most pleasant seasons on the Texas Gulf Coast. Temperatures are moderate, and there are frequent periods of mild, fair weather. Precipitation is most often the showery type. In the fall, the waters of the Gulf remain warm for the full enjoyment of water sports.

Tropical storms are a threat to the Texas coast in the summer and fall, as they are to any section of the Gulf Coast; however, storms of hurricane intensity do not occur often, and the probability of a storm of such severity striking a particular location, within any particular year, is exceedingly small. Since hurricanes move slowly, adequate warnings are issued by the National Weather Service well in advance of landfall.

ARKANSAS WILDLIFE REFUGE, TEXAS

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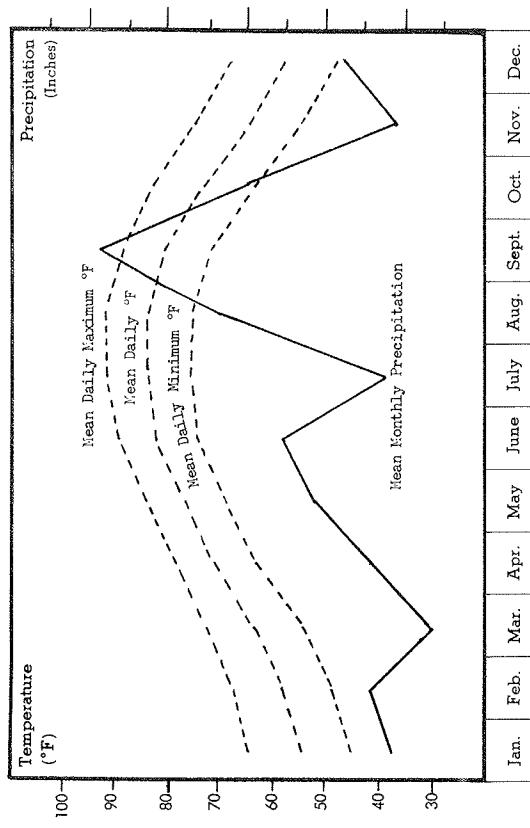
Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1942	51.7	55.5	62.2	68.8	75.0	81.6	83.0	82.1	77.6	73.8	66.0	60.0	69.6
1943	54.2	62.0	60.7	73.0	77.6	81.9	83.2	84.6	78.9	70.8	61.0	54.1	70.2
1944	53.2	73.2	70.8	73.8	82.5	80.6	82.4	84.6	80.6	71.6	64.8	55.0	71.4
1945	56.1	61.5	70.2	81.2	81.0	83.4	82.2	82.5	82.4	-	-	-	-
1946	52.0	63.4	66.2	72.9	78.5	80.5	82.8	83.2	80.7	75.9	64.9	58.6	71.6
1947	52.4	59.4	59.4	70.0	75.7	83.4	84.6	82.9	80.7	76.8	63.8	56.6	69.8
1948	49.6	56.2	62.7	72.8	78.0	83.6	-	83.8	78.6	71.5	63.7	61.4	-
1949	53.0	60.8	64.7	68.4	78.6	83.5	83.7	83.0	81.9	74.6	64.4	62.2	71.7
1950	64.5	63.0	64.3	71.6	79.4	82.5	84.1	83.2	82.6	75.8	63.2	58.8	72.5
1951	56.7	58.0	66.2	69.7	77.0	83.6	85.3	86.1	81.9	75.7	62.1	56.0	70.3
1952	63.0	61.6	66.7	69.4	76.1	82.6	83.8	84.2	78.8	67.0	62.5	56.0	70.9
1953	60.5	57.8	60.5	71.2	72.8	77.7	85.1	85.5	82.8	79.6	73.7	64.2	56.9
1954	60.6	65.5	-	73.8	75.1	83.0	84.7	84.8	83.5	75.7	63.1	58.8	-
1955	57.7	65.5	65.5	73.7	79.2	81.6	82.0	82.6	80.8	76.3	61.8	56.7	71.7
1956	55.1	-	62.1	68.5	77.1	82.6	83.2	82.6	80.8	76.3	60.3	-	-
1957	59.0	65.4	64.6	70.3	76.5	81.3	83.7	83.3	77.9	71.4	62.1	56.2	71.3
1958	53.0	55.3	59.9	70.0	76.9	84.0	84.8	84.9	80.9	71.7	64.6	54.1	70.0
1959	52.5	58.1	62.8	67.5	78.1	82.0	83.0	82.8	81.0	73.9	58.9	57.2	69.8
1960	54.6	58.2	58.9	71.0	74.2	81.9	84.7	83.7	78.7	75.4	65.2	59.7	69.7
1961	50.8	58.3	66.1	68.9	77.6	80.5	83.7	81.3	80.1	72.3	61.7	58.5	70.0
1962	49.5	65.2	61.2	69.6	77.4	81.5	83.9	85.4	82.2	76.9	62.3	55.9	70.9
1963	48.7	53.8	66.9	72.6	78.4	82.7	83.5	83.9	81.6	67.0	50.8	47.7	70.7
1964	55.5	62.0	63.5	72.1	79.4	83.7	84.2	81.6	69.3	68.1	57.5	50.5	70.3
1965	58.7	58.2	62.5	71.2	76.7	80.2	82.7	81.9	80.7	78.2	68.3	69.5	70.2
1966	56.2	62.5	69.7	75.1	75.4	79.2	83.0	82.2	79.2	70.9	66.5	56.4	69.2
1967	54.1	56.1	66.7	69.7	75.1	76.9	82.2	83.0	79.2	78.2	66.2	57.0	70.6
1968	52.3	52.3	60.4	70.7	77.5	80.4	82.4	83.9	-	75.5	-	58.9	-
1969	56.6	57.9	57.9	70.6	74.7	82.2	83.5	83.2	-	72.7	-	57.2	-
1970	51.2	58.5	60.3	71.3	79.7	83.0	84.6	80.1	70.0	-	-	-	-
1971	57.6	60.0	-	-	-	-	-	-	79.0	74.7	66.5	62.3	-

STATION HISTORY

A climatological station was established at the town of Austwell, National Wildlife Refuge, 7.5 miles south-southeast of the observer on June 5, 1940. For the convenience of the observer, the equipment was relocated to site 7.5 miles south-southeast of Austwell on June 13, 1944. On December 15, 1970, the National Weather Service equipment was removed, and the Texas Water Development Board, in cooperation with the National Wildlife Refuge installed an evaporation pan, rain anemometer, cotton region shelter, maximum and minimum thermometers, and a standard eight-inch non-recording rain gage. The name was changed to Arkansas Wildlife Refuge. Daily temperature and precipitation data are published monthly in Climatological Data - Texas. Station index number: 41-0305-07.

Total Precipitation (Inches)



Single copies of this summary are available without charge from the Bureau of Business Research, the University of Texas, Austin, Texas 78712. Quantity rates upon request.

Climatologist for Texas
National Weather Service
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